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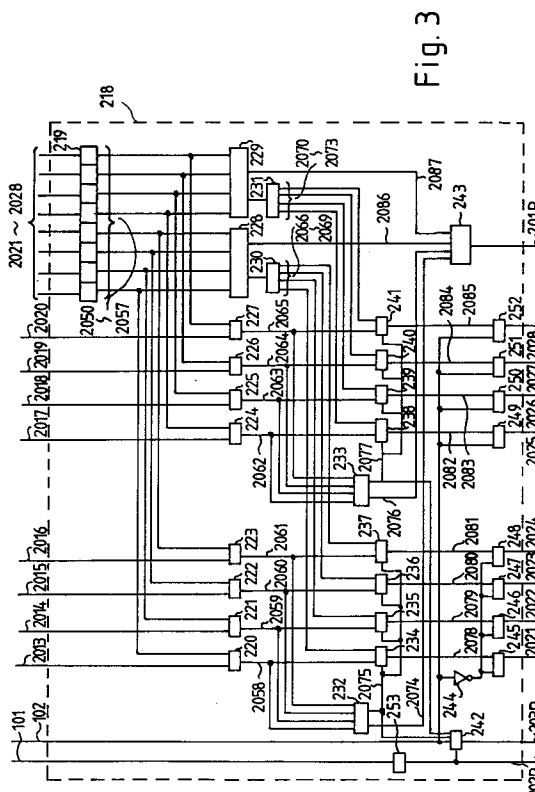
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Siebertstrasse 4 P.O. Box 86 07 67
W-8000 München 80 (DE)(54) **Data processing system with address translation function for different page sizes.**

(57) The data processing system translates a logical address made up of a partial space number, a logical space number and an address within a page to a physical address made up of a physical page number and the address within a page and accesses a memory section under the coexistence of a plurality of page sizes. The system further comprises a table holding section for holding a plurality of sets of copies of a plurality of address translation tables stored in the memory section on a partial space basis. The plurality of sets of copies are each assigned to a particular page size. A load control section loads one of the plurality of address translation tables into the table holding section in response to an address translation table load command. A directory supervising section supervises partial spaces each corresponding to one of the plurality of address translation tables held in the table holding section. A first loading section executes by defining the partial spaces assigned to the same page size as a single supervisory unit in the directory supervising section, load control over the plurality of address translation tables independently. This data processing system is capable of translating addresses having a plurality of page sizes dynamically to thereby enhance efficient use of a memory and improve the overhead of an operating system.





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EUROPEAN SEARCH REPORT

Application Number

EP 92 11 6015

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y A	EP-A-0 373 780 (IBM) * abstract * * column 7, line 9 - column 12, line 13 * * figures 1-4 * ---	1 3	G06F12/10
Y	PATENT ABSTRACTS OF JAPAN vol. 11, no. 170 (P-581)2 June 1987 & JP-A-62 002 338 (NEC) 8 January 1987 * abstract * ---	1	
A	US-A-3 938 100 (STEINER) * column 3, line 15 - column 4, line 21 * * column 5, line 19 - column 6, line 20 * * figures 2,3,6 * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G06F
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 04 FEBRUARY 1993	Examiner MASCHE C.M.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			